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Substitute for form 1449/PTO	Complete if Known		
	Application Number	14/5/5/57	
INFORMATION DISCLOSURE	Filing Date	March 22, 2006	
	First Named Inventor	Artemi MARTSINOVSKY	
STATEMENT BY APPLICANT	Art Unit		
(Use as many sheets as necessary)	Examiner Name		
heet 1 of 2	Attorney Docket Number	12096.PCT.US	

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (# known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
-⁄J.K./		^{US-} US-6,417,060-B2	07/09/2002	Tavkhelidze et al.	
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FOREIGN PATENT DOCUMENTS							
	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	П	
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)	MM-DD-YYYY	Approximor oned bodinera	Or Relevant Figures Appear	T ⁶	
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Substitute for form 1449/PTO		Complete if Known			
	-			Application Number	48 127720
			CLOSURE	Filing Date	March 22,2006 7 2 2 3 9
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Sheet	2	of	2	Attorney Docket Number	12096.PCT.US

NON PATENT LITERATURE DOCUMENTS					
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/J.K./		KOROTKOV et al., "Possible cooling by resonant Fowler- Nordheim emission", Applied Physics Letters, 18 October 1999, pp. 2491-2493, Vol. 75 No. 16, American Institute of Physics, USA.			
/J.K./		CUTLER et al., "New Results on Microelectronic Cooling Using the Inverse Nottingham Effect. Low temperature Operation and Efficiency", Electrochemical Society Proceedings, November 2000, pp. 99-111, Volume 2000-28, Electrochemical Society, USA.			
/J.K./		HISHINUMA et al., "Refrigeration by combined tunneling and thermionic emission in vacuum: Use of nanometer scale design", Applied Physics Letters, 23 April 2001, pp. 2572-2574, Vol. 78 No. 17, American Institute of Physics, USA.			
/J.K./		HISHINUMA et al., "Vacuum thermionic refrigeration with a semiconductor heterojunction structure", Applied Physics Letters, 25 November 2002, pp. 4242-4244, Vol. 81 No. 22, American Institute of Physics, USA.			
/J.K./		HISHINUMA et al., "Measurements of cooling by room- temperature thermionic emission across a nanometer gap", Applied Physics Letters, 1 October 2003, pp. 4690-4696, Vol. 94 No. 7, American Institute of Physics, USA.			

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